



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,011	06/25/2003	Keitaro Suzuki	239312US0 DIV	2431

22850 7590 09/15/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

METZMAIER, DANIEL S

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,011

Applicant(s)

SUZUKI ET AL.

Examiner

Daniel S. Metzmaier

Art Unit

1712

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/25/2003; 9/25/2003; 9/1/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/637,029.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/25/03; 9/25/03
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claims 9-18 are pending.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No.

09/637,029, filed on August 14, 2000. ***Information Disclosure Statement***

2. The references crossed out on the Information Disclosure Statement (IDS), filed September 25, 2003, are duplicate citations and were considered as denoted in the IDS file June 25, 2003, enclosed herewith.

Specification

3. The disclosure is objected to because of the following informalities: the cross-noting section of the specification as set forth in the preliminary amendment filed as Item No. 18, transmittal sheet, filed June 25, 2003 is objected for the following reasons: the said cross-noting requires (1) updating the status of the parent application and (2) should be in proper sentence form.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 10-18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nissan Chemical Ind., Ltd, WO/39253, as evidenced by Watanabe et al, US 6,296,943. Watanabe et al '943 is a patent family member of Nissan Chemical and is used as translation evidence of the Nissan Chemical disclosure. The citations refer to those set forth in Watanabe et al '943, the disclosure which is considered to be the same or substantially the same in the Nissan Chemical reference.

The claims define an optical substrate with a cured film defined by the coating composition employed to coat said substrate. Said claims are deemed to be in product-

by-process format and patentability is evaluated based on product-by-process format. The process limitations in product-by-process claims are only given patentable weight to the extent said process limitations would necessarily impart a patentable limitation to the resulting product. See MPEP 2113.

Nissan Chemical (column 5, lines 4 et seq) discloses optical elements derived from mixtures of (A) and (B) reading on the claimed compositions when viewed as a whole. Nissan Chemical (column 18, lines 1-13) discloses the hydrolysis of the components (A) and (B) are carried out in acidic media. Nissan Chemical (column 20, lines 40 et seq) discloses the addition of curing catalyst comprising organic acid salts and alkoxides of aluminum, zirconium or titanium. Preferred are the acetylacetoates of aluminum. Said salts or alkoxides in acid media would have been expected to have formed colloidal acidic oxides via at least some hydrolysis and condensation of the salts and/or alkoxides and would have coated the particles previously set forth as (B).

Nissan Chemical (column 21, lines 9-140 further teaches the coatings may further contain the specific metal oxide particles so as to conform to the refractive index of various optical elements and include aluminum oxide, titanium oxide, antimony oxide, zirconium oxide, silicon oxide, cerium oxide, etc. Nissan Chemical (column 13, lines 19-27) clearly further discloses the use of alkylamines.

Nissan Chemical (column 21, lines 60 et seq) further discloses the further coating the optical elements with an anti-reflective coating in a multilayer film.

To the extent the optical elements claimed differ as not disclosed with sufficient specificity in the Nissan Chemical reference, it would have been obvious to one of

Art Unit: 1712

ordinary skilled in the art at the time of applicants' invention to make optical elements within the teachings of the Nissan Chemical reference employing the disclosed additives for their disclosed advantageous additive properties taught in the Nissan Chemical reference.

8. Claims 10-13 and 16-18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nissan Chemical Ind., Ltd, EP 0 909 784. Nissan Chemical '784 (abstract; column 3, lines 54 et seq; column 6, lines 13 et seq; column 11, lines 23 et seq; examples; and claims) discloses compositions for treating optical components comprising an anhydrous zinc antimonite sol.

Nissan Chemical '784 (column 3, lines 54 et seq; paragraph [0012]) discloses the zinc compound include zinc salts, hydroxide, and zinc oxides alone or in combination and having a primary particle size of less than 500 nm. Nissan Chemical '784 (column 4, lines 33-38) discloses the antimony sols are acidic sols having a primary particle size of 2 to 200 nm. Nissan Chemical '784 (column 5, lines 47 et seq) discloses the zinc antimonite have a particle size of 5 to 500 nm. Said particle size encompasses the particle size claimed.

To the extent the Nissan Chemical '784 differs from the claims in that the particle size is not defined with sufficient specificity, it would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to vary the particle size with the rang disclosed in the Nissan Chemical '784 reference.


Art Unit: 1712

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM